

SPECIFICATION

Please replace the paragraph that begins on page 7, line 25, with the following paragraph:

As another alternative, silicon layer 16 may be transferred from a simpler semiconductor structure than semiconductor structure 10. In such case the silicon is not stressed. This is a common approach for transferring a silicon layer to the buried oxide layer to form an SOI wafer. The difference is that the silicon layer being transferred that has a {100} phase surface is transferred such that it's its <100> direction is 45 degrees offset from the <100> direction of the underlying thick silicon substrate. As an alternative this silicon layer being transferred can have a {110} phase surface. After the silicon formation, a germanium condensation process may be used to develop a silicon germanium layer. This is known to be achievable by forming silicon germanium and oxidizing that layer which has the effect of driving germanium into the silicon layer with the desired concentration of germanium. The upper oxide layer is removed leaving a silicon germanium layer that has the desired concentration of germanium. A subsequent layer of silicon is then grown from the silicon germanium layer with the desired germanium concentration. This silicon over silicon germanium then forms the active semiconductor layer for transistor formation and can be made to have the desired strain based on the underlying germanium concentration and with the desired <100> orientation for transistor formation.